ADDRESS DELIVERED AT THE FIFTY-THIRD ANNUAL MEETING OF THE WOMAN'S HOSPITAL IN THE STATE OF NEW YORK

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BY

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THE HOSPITAL FUTURE OF GREATER NEW YORK

THE hospital future of Greater New York is a subject which appeals not alone to those immediately participating in hospital development, but its problems are alike humanitarian and sociological, and are intimately connected with many aspects of the city's growth. We seem to delight in working out our own salvation in public matters in an amateurish way, without coöperation and without regard to the experience of others. In New York city we witness thirteen different classes of hospitals under as many types of management, all as sublimely independent of one another as if no other type existed. These are:

1 A group of hospitals under a single Commissioner in the Department of Public Charities.
2 A group of hospitals for contagious diseases under the Health Board.
3 A group, of four, the Bellevue and Allied Hospitals, under a board of seven trustees.
4 A group of large independent hospitals supported by voluntary aid, and receiving no city funds, of which the Presbyterian and New York Hospitals are types.
5 Hospitals partly supported by the city and partly by private contributions.
6 Hospitals based upon anatomical peculiarities, like the Skin and Cancer and the Woman's Hospitals.
7 Hospitals for specialties, like the New York Eye and Ear.
8 Hospitals based upon linguistic traits, like the French, the

Swedish, the Norwegian, and the Italian Hospitals. There are 50,000 Greeks in New York at present. Are we soon to look for a Greek Hospital? There are 500,000 Italians in the city, and by far the greater proportion of their sick are treated in other hospitals than their own,—hence they do not need a special hospital.

9 Hospitals having a strong religious bias, like St. Mary's and the Jewish Hospital.

10 A hospital founded on race,—the Lincoln, for the colored population.

11 Hospitals founded upon medical creeds, like the Hahnemann.

12 Hospitals founded for medical schools, like the Postgraduate and Polyclinic.

13 Hospitals founded on the age of patients, like the Babies, the Montefiori, etc.

In all, in Greater New York, a total of sixty-one hospitals for general diseases and general surgery, exclusive of all the hospitals for specialties, for children, for the lying-in, etc. Sixty-one hospitals, almost all working absolutely independently, without coöperation in purpose, without system in the transfer of patients, without uniformity in accounts, and many of them, even among the best, without any adequate facilities for treatment of many classes of patients which they admit; many of them outgrown, outworn, and chronically in debt, and for the most part planted haphazard, anywhere, without reference to ease of access, overlapping of ambulance territory, or advantages of environment.

One of our largest general hospitals often exhibited to visitors as a type of the best, is entirely lacking in adequate facilities for hydrotherapy; it has no room to properly isolate a noisy, delirious patient, no dark room in which to make a thorough examination of the eye, no proper modern appliances for giving a hot-air bath, or an inhalation. Yet its policy is to take in every patient who applies, regardless of the nature of his ailment, or its ability to afford the best and most modern means of scientific relief, and it is only a type of many others.

How differently all this is managed in continental Europe! In Germany, for example, as in Düsseldorf, Frankfort, Berlin, etc., the most important part of the modern hospital is the "therapeutic institute," often a separate building, where every kind of modern appliance is found for treatment, including elaborate arrangements for all

kinds of bathing, mechanical apparatus for special exercises, all manner of electrical instruments, X-ray rooms, inhalations rooms, rooms for special forms of douching and massage, electric light baths, etc., besides extensive facilities for laboratory preparations for modern serum and vaccine treatment, with facilities for animal experimentation to aid in diagnosis.

These buildings are often as large as the ward buildings. Yet, as Dr. Dana pointed out in a recent letter to the "Medical Record," written from Italy, the whole of New York cannot boast of a single complete equipment of this sort, comparable to what is found in Rome, for example.

In Paris is illustrated what coöperation in hospital management really means. There, twenty-eight general hospitals are under a single board of municipal control. All the hospital supplies are distributed to the several institutions from the headquarters stores; thus there is a central drug warehouse, central grocery, central laundry, central bakery where the bread for all the hospitals is baked and distributed. There is a central wine cellar and even the temperature charts and other blank forms are all printed uniformly and distributed. A central library devoted to hospital literature contains 3,000 volumes on hospital construction and administration, with hospital reports and blue-print architects' plans of the more important structures. The annual financial report shows exactly how much is expended in each separate hospital for meat, vegetables, linen, drugs, etc., so that any extravagance is easily detected, and the net result is a per capita per diem cost of only eighty cents. Compare that with the $2.80 cost that not a few of our institutions are constrained to publish!

What are the influences at work at the present time to secure a logical system of hospital control, coöperation, and development in the city?

First: About four years ago a conference of hospital superintendents and managers was called at the State Charities Aid Building to consider various hospital problems of common interest. This conference, the first of its kind ever held in this city, grew largely out of the prevalent criticisms that many of our hospitals are extravagantly managed, and that trustees are not always sufficiently solicitous to avoid extravagant expenditure—such criticisms as were so ably supported in the anniversary discourse of Dr. Gerster at the Academy of Medicine a few years ago. This conference has not been productive of any striking results, but it was an awakening, and its chief out-

come has been the furtherance of a uniform system of accounting for all hospitals.

Second: The question of securing uniformity in hospital accounts has been advocated by the Hospital Conference, an association of hospital superintendents in New York, and by the American Hospital Association, with the result that ten hospitals in New York, including many of the largest general hospitals not under civic control, are today using the same standard system of bookkeeping and accounting, together with the Massachusetts General Hospital and one in Jersey City. These hospitals have published in book form their standard formulæ and blanks which before long will probably be generally adopted.

Third: About three years ago the Hospitals Committee of the State Charities Aid Association expended a considerable fund to employ a statistician to gather data as to the hospital accommodations and hospital census of the city, data which were thus for the first time tabulated. The committee then spent eighteen months studying these data and formulating conclusions and recommendations regarding the future hospital requirements of Greater New York. Their report was published in pamphlet form on January 1, 1908, and contains much valuable information regarding construction and management. This committee at the same time issued a report upon the ambulance service, based upon a similar statistical study, the first one of the kind ever made in this city.

Fourth: On January 31, 1906, the Mayor appointed a special commission of twenty-one citizens, to devise, as he expressed it, "some comprehensive plan for the reorganization, extension, and administration of the public hospital system in the city of New York." This commission conducted hearings and gathered testimony from many sources, such as from hospital superintendents, the heads of the police and fire departments, the Health Board, coroners, those familiar with ambulance work, etc. Their conclusions, adopted July 28, 1908, have been published in a pamphlet, but the data gathered will fill a large volume which is still in press. After summarizing the present lack of system, and comparing it with such an anomaly as having "three separate and independent fire or police departments for the city," they offer the following important conclusions and suggestions:

1 The hospital facilities of the city are inadequate, and unevenly distributed.

2 There is no definite understanding or judicial interpretation of the limitations of authority of the several municipal hospital departments, and consequently no coöperation in their work.
3 There is no uniformity in the purchase of supplies or in the scale of wages.
4 The divided responsibility prevents the formulation of any definite policy to meet the rapidly growing needs of the city.
5 It is, therefore, recommended that the Charter be amended to establish a single Department of Public Hospitals to be administered by a single commissioner selected by a Board of Trustees, not exceeding seven in number, to be appointed by the Mayor, to serve for six years and without compensation.
6 The new department should take charge of the entire ambulance service of the city and establish relief stations.
7 The commissioner of the Health Department should be an ex officio member of the new Hospital Board of Trustees, in order that he may act on a subcommittee of three to control the hospitals for contagious diseases now administered by the Health Board.
8 "The existing rights of medical educational institutions and of medical boards should be carefully safeguarded, and extended in the public interest wherever practicable."

If the provisions of this report should become law, the trustees of Bellevue and Allied Hospitals would be legislated out of office, while their hospitals, together with the hospitals of the Charities and Health Departments, would all be placed under the same central control; but the other work of the Charities Department and of the Health Department, including its sanitary police functions, would remain undisturbed. The ambulances would be taken from the control of the private hospitals and the service administered by a single central bureau, similar to the admirable one which exists in Berlin.

The report also endorses the full development of Blackwell's Island for exclusive hospital use, the establishment of Emergency Relief Stations, and the extension of the system of Convalescent Relief Work now admirably conducted in connection with Bellevue Hospital and elsewhere.

In order properly to discuss the future hospital requirements of Greater New York, it is essential to determine present conditions with

accuracy. The statistics collated for the Hospitals Committee of the State Charities Aid Association, show that on January 1, 1908, there were in all the city 10,926 hospital beds which on that day contained 8,447 patients, thus giving an excess of 2,479 unoccupied beds on that day, or, approximately, 23%—nearly one bed in four unoccupied in a midwinter season. This statement, without further explanation, might be misleading by implying that no further hospital accommodation is needed for some time to come. On the contrary, owing to the peculiar distribution of our hospitals and lack of an organized transfer system, overcrowding does exist at times in certain hospitals, especially during grippe epidemics. It often happens that one hospital, like the Bellevue or the New York, is overcrowded, while another like St. Vincent's may have many empty beds, but whoever thought of transferring patients to St. Vincent's or St. Mary's? Owing to entire lack of a proper ambulance system with a central clearing-house, Bellevue is the only hospital to which transfers are made, except as they subsequently are made from there to Blackwell's Island.

In Berlin is a central ambulance "clearing-house" or telephone exchange, in connection with all hospitals, the fire and police stations, the emergency relief stations, and ambulance houses. Every morning each hospital telephones to it the number of its vacant beds. When an ambulance is called, the patient is taken first to the nearest relief station, which is fitted with a half dozen beds and emergency appliances. Many patients thus received do not need to go to hospitals at all. When they do need hospital treatment and the nearest hospital is full, they are taken to another, where there are vacant beds, and the whole process of transfer is directed from the central station. Our hospitals maintain elaborate independent ambulance services, often at an expense of $4,000 or $5,000 a year, and all the thanks they get is a "roasting" in the yellow journals when a patient happens to die during transfer, and the hospitals are accused of trying to keep down their death-rate! Yet does any one really know the death-rate of the hospital in which he works? I am sure I do not. Nor does it matter. For example, the death-rate of a hospital like the Hudson Street or Gouverneur, in a densely populated district, with frequent accidents, may be higher than in St. Luke's, in a more exclusive neighborhood. This, of course, constitutes no criticism on treatment. Among the 50,000 patients carried annually in our ambulances, a few sudden or unexpected deaths are bound to occur without reflection on any one's

judgment. Even among 50,000 persons in health, about 3 per cent. of sudden deaths occur.

In round numbers, let us say, there are now 11,000 beds which prove adequate for a 4,400,000 population, or 1000 beds per 400,000 population. With an estimated population of 6,000,000 in 1920 (which is calculated from our present rate of increase), 4000 additional beds would be needed within eleven years. Shall we pursue our original policy of building costly multistory hospitals in crowded districts, or adopt a more enlightened scheme, as recommended by the Hospitals Committee of the State Charities Aid Association? This plan comprises the evolution of the following system:

1 *Ambulance relief stations* with a half dozen beds each.
2 *District general hospitals.* For this purpose the hospitals now existing, and having 100 or 200 beds, to be used for acute disease and emergency accident cases chiefly.
3 *Large general hospitals* of 1500 to 2000 beds, to be constructed at Bellevue, Blackwell's Island, and the King's County Hospital grounds, to accommodate the less acute cases.
4 *Convalescent hospitals* (like the New York Hospital branch at White Plains), to include also patients needing fresh air or environmental treatment, and chronic incurable cases needing more or less constant care.
5 *Hospitals for tuberculosis* on Staten Island, at Otisville, and elsewhere.

By this system, the overcrowding of existing hospitals on the island of Manhattan may be postponed indefinitely, and no new ones need be constructed on Manhattan Island, where land is dear, and environment relatively undesirable. With organized coöperation and a rational transfer system, this plan is perfectly feasible and presents unmistakable advantages. The essential difficulty with our present hospitals is that in eagerness to meet varied and often urgent needs, we have proceeded as individuals, without stopping to devise any comprehensive plan looking toward future requirements, or adopting any system of coöperation. The result is a "patchwork of unrelated parts." Our existing hospitals are structurally a generation behind the modern European hospitals. In Rome, for example, is a modern hospital, the Policlinico Umberto Primo, which in structure, extent, and administrative scope is vastly in advance of anything we possess. Its

forty-four buildings cover forty-five acres of ground although it is no further from the Quirinal than the Woman's Hospital is from the Flat-iron Building.

In Berlin are three hospitals which collectively cover 124 acres, all within an ambulance drive of twenty minutes from the Unter den Linden. When one of these, the Virchow, was projected, the first thing done was to plant the trees, so that when the fifty-three buildings composing the entire system were completed, ten years later, the patients had an attractive outlook and grounds for exercise, recreation, and fresh-air treatment. The motto over the door of this hospital is "Treat the patient, but do not omit to treat the man."

The first broad-minded, comprehensive, and far-reaching scheme for public hospital development of Greater New York which has been devised, is that thought out by Commissioner Hebberd, the head of the Department of Public Charities, and already well advanced by him. This plan contemplates the use of the entire Blackwell's Island for a great hospital plant of the low pavilion type, capable of eventually accommodating 8,000 or 10,000 patients. This plan presents unique features not only for New York itself, but as compared with any existing hospital. This island, which already belongs to the city, occupies the geographical center of Greater New York, comprises eighty-four acres, and with contemplated filling in which has been already allowed by the War Department and Department of Docks, this area will be extended beyond 100 acres, the lower end reaching to the Steinway tunnel, where a subway entrance is planned, opposite Forty-second Street. Access may also be had by the Queensboro Bridge, which crosses the island opposite Fifty-ninth Street. A power-house is being constructed beneath, which will take electric power for lighting and other purposes from cables brought on the bridge. Ferries will ply in four minutes from Fifty-third and Eighty-sixth Streets, and, if necessary, from docks in between. The commissioner is already constructing an ambulance and relief station at the Fifty-third Street dock, and the boats will be adapted to carry ambulances across, so that patients may be driven from the up-town hospitals to the door of the island hospitals quicker and easier than they are now taken to Bellevue. Other patients from any of the Boroughs of Greater New York may be carried by the department boats to any of the island docks, and coal and general supplies may be transported easily and cheaply to the power-house and storehouses on the east side of the island, thereby greatly reducing the current expenses of the institu-

tion. One of the new department boats, named after the late Mrs. Lowell, is adapted to hold 300 patients. It is fitted with special doctors' and nurses' offices, and while in use for general hospital purposes, serves also as an excursion boat on which the patients may sail upon the bay or sound for fresh-air treatment and recreation. A small electric railway may be constructed around the island, and the major groups of buildings will be connected by subways and corridors like those in the Policlinico Hospital in Rome or the Boucicaut in Paris. The island will contain several large groups of buildings, besides three large parks. The present penitentiary is to be removed to Riker's Island, where a new building is under construction. The Work House will be torn down and the inmates removed to the Poor Farm at Staten Island. Although a hundred or more ward pavilions and other hospital structures eventually may be built upon the island, there will still remain ample space for three large parks. The buildings are planned upon the low pavilion unit type, not more than two or three stories high. The advantages of this system, which is now universal in the important foreign hospitals, are as follows: Expensive iron work and heavy foundations are not required. The type of building is not unalterably fixed as it is in a multistory building on a restricted city lot. The buildings, therefore, need not all be constructed at once, but a new pavilion of two or three wards may be built as needed. The supply keeps pace with the demand, and each new pavilion fits into a well-conceived plan. Expensive elevator service is not demanded and patients have at all times easy access to the attractive grounds. The island is cool in summer and affords change of scene and diversion in watching the passing boats. It is free from the dust and noise and general tension of environment of the crowded city, and yet is of easy access for patients and their friends. Every environmental advantage, especially for outdoor treatment, is thus secured. There is space for day rooms for convalescents, for isolation rooms for the noisy, delirious, or those needing special conditions of temperature, light, repose, etc. The modern idea that *a hospital building should become a factor in treatment* may be fully carried out. The typical existing hospital of the multistory type is a good boarding-house perhaps, but when built up in the air on a restricted lot, one large ward is precisely like another—there can be no proper classification of patients. Those needing rest and quiet are kept awake by the noisy delirious patients in the next bed. Those needing a cheerful environment are confined next to the suffering and dying. All are sub-

jected to a uniform, unvarying temperature, regardless of the fact that some need wide open windows or balcony treatment, while others need hot-air baths, or packs, or poultices. The convalescents have nowhere to go for rest and change, and who ever saw a space in a city hospital for them to exercise?

There are those so bold as to suggest that we are getting the "hospital habit." The well-to-do no longer have homes but "apartments"; they have no room for illness and no room for nurses, so they enter hospitals in increasing number. Their example tends to attract the poor, who think that, after all, hospitals are not so bad when they read in the morning paper that "Mr. X, the well-known financier, has just had his appendix removed," or "his pneumonia treated at some famous hospital." The poor, moreover, are being "rounded up" and sent to hospitals by the district nurses. They enter hospitals in nearly double the ratio to the total population in which they did two decades ago. During the fifteen years from 1890 to 1905, the ratio of the poor who were treated in general hospitals increased 85%, whereas the general population increase for the same period was only 64%. This ratio of increase will doubtless soon reach its maximum, but it has not yet done so. In Paris, on the other hand, one third of the total annual municipal expenditure for the sick poor is devoted to caring for them in their own homes by a paid staff of physicians. It might be difficult to inaugurate such a system here, if not unconstitutional, but if we are not careful, we can easily overdo the extent of our hospital treatment. There are some humanitarian advantages in remaining at home when ill, where the family may assume some share of care and responsibility, provided, of course, that there is a home and a family. We owe a great debt to tuberculosis for what it has done for the treatment of other diseases. It has taught that fresh air is not a *specific* for that disease alone, but merely increases resisting power against the inroads of any serious disease, hence the open air treatment of pneumonia, anemia, blood poisoning, and many other desperate conditions which is everywhere yielding such remarkable results. It has completely reconstructed our ideas of hospital architecture, demanding accessible balconies opening from every ward, and flat roofs for exercise, recreation, and fresh air. It has abolished that most pernicious system known as "forced ventilation" (so called) at fixed temperatures, which, while it supports life, has nothing *uplifting* in its influence on those whose breathing and blood and circulation need the stimulus that we all feel in health when we step into the pure fresh

air from a closed room. And, finally, through the tuberculosis clinics and district-nursing system of this city, it has furnished a striking example of what may be accomplished by properly organized coöperation in the broad medical work of the city.